**FIG. 1**



**FIG. 2**

### Figure 3

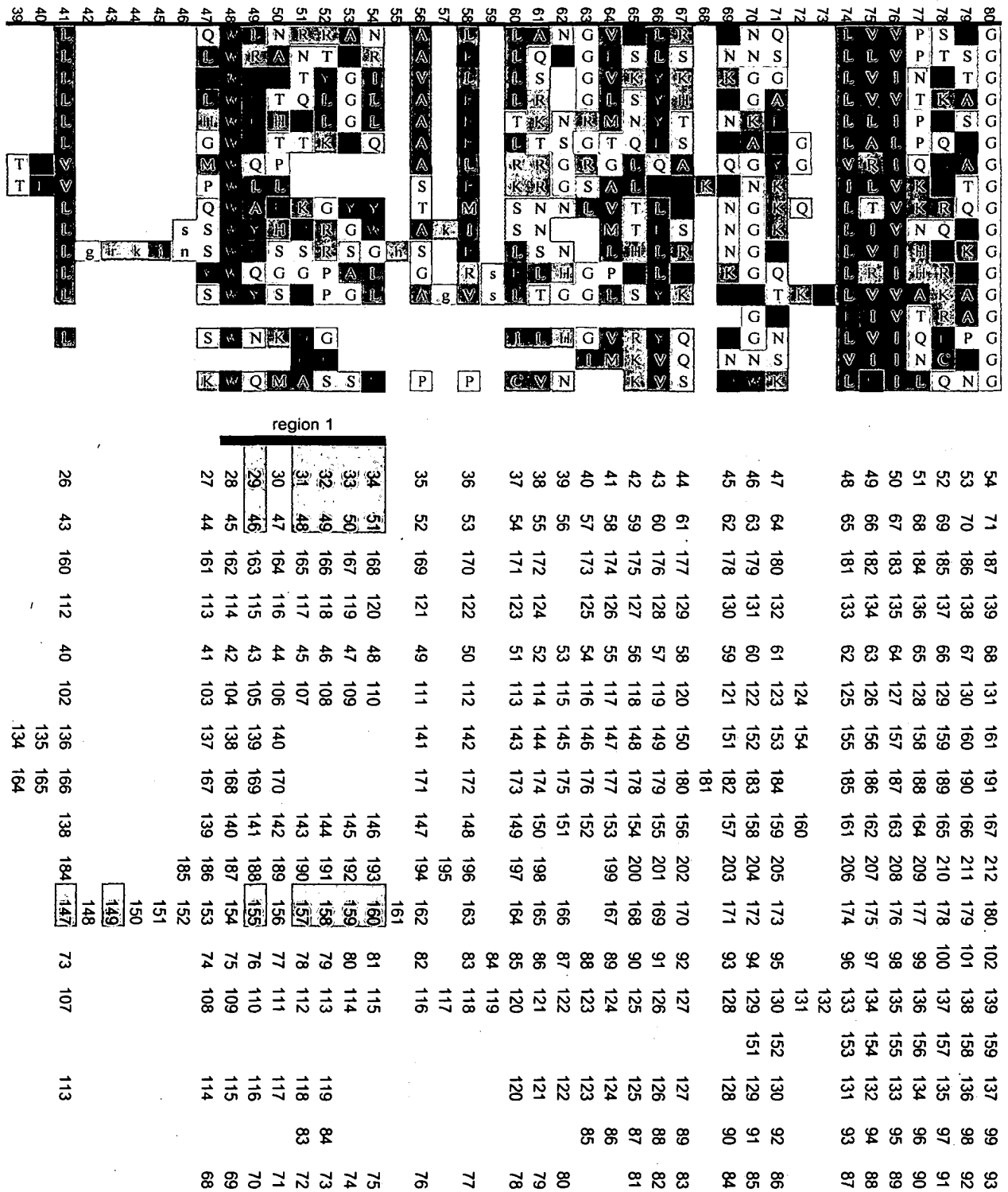


Figure 3

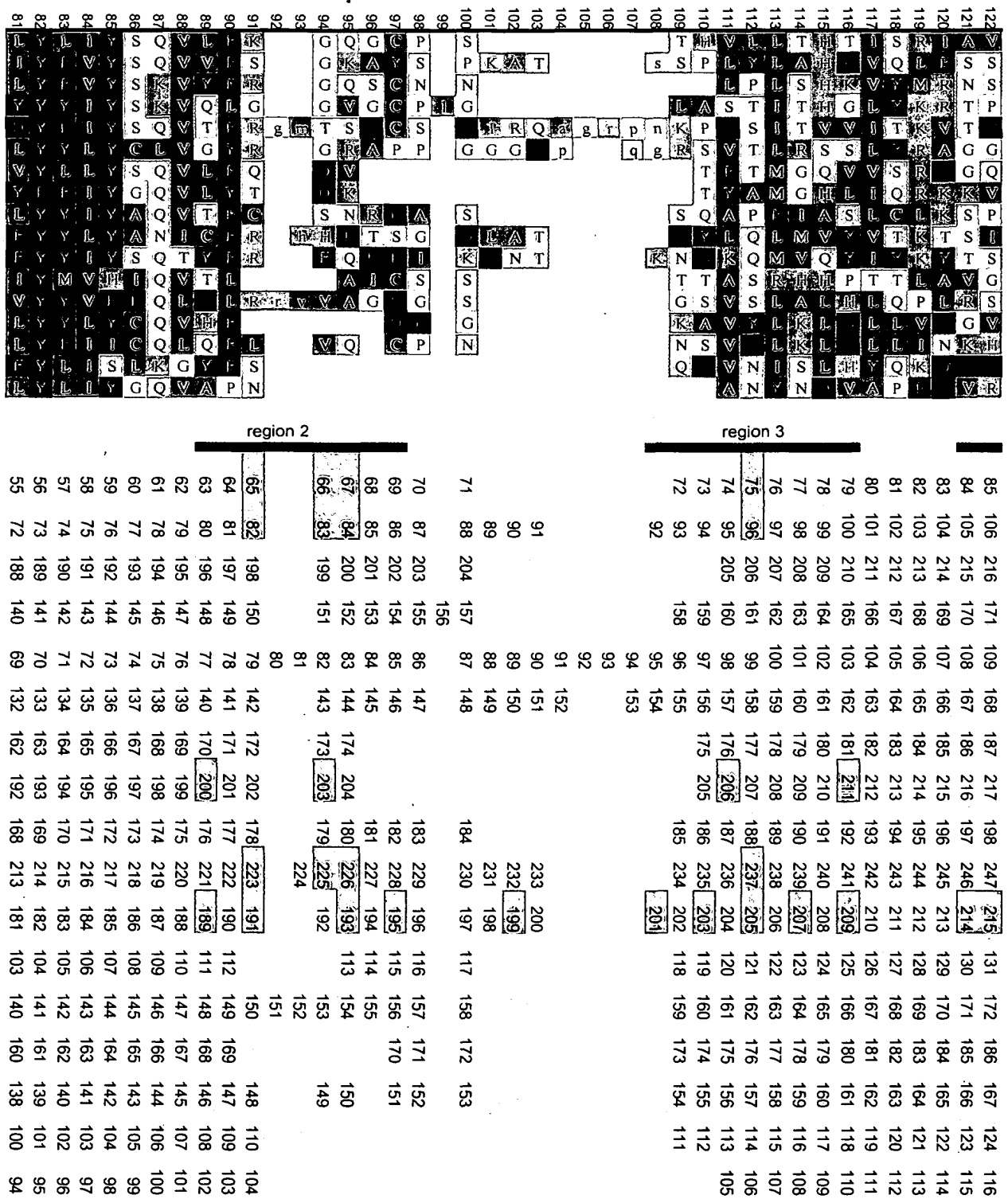


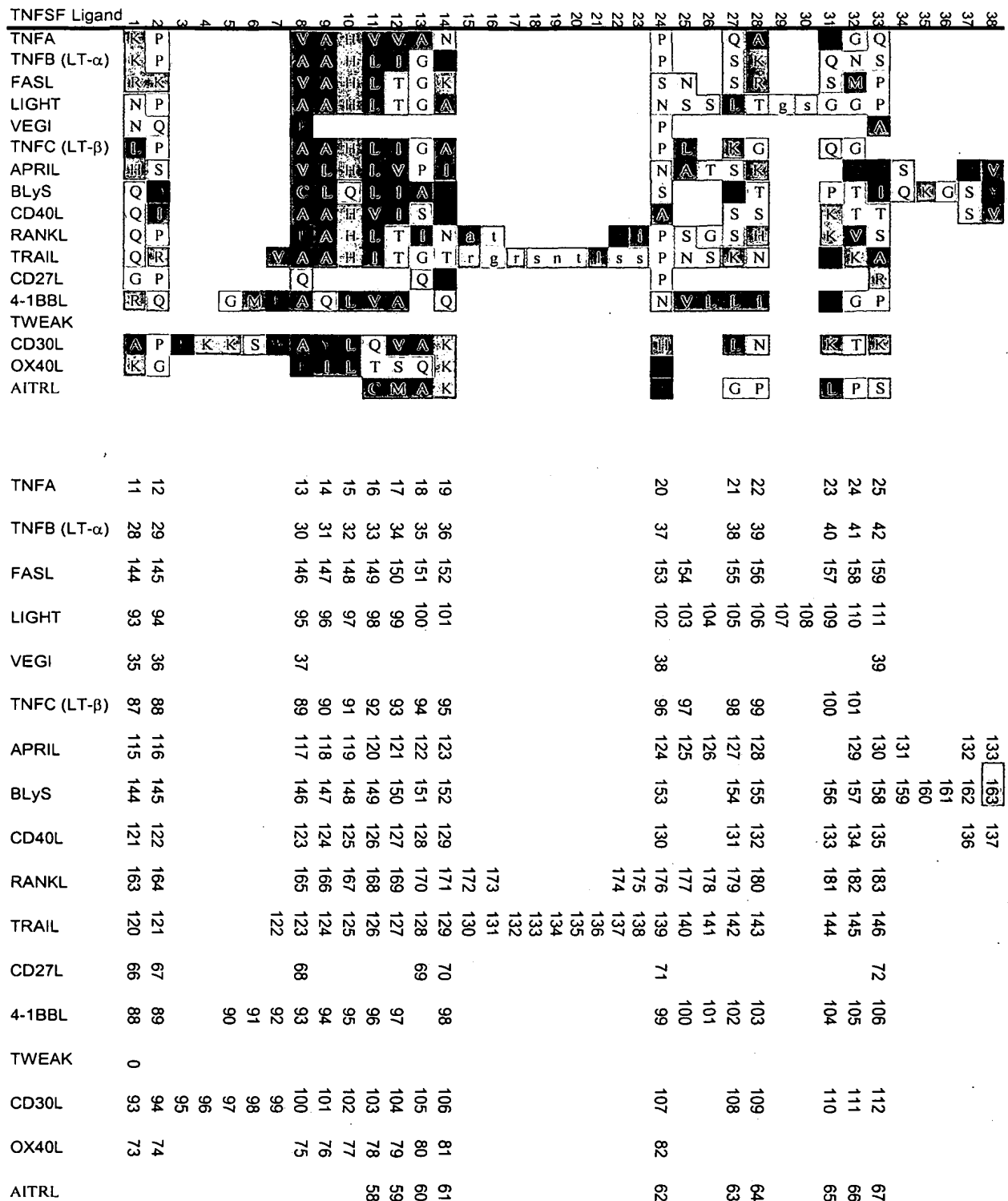
Figure 3

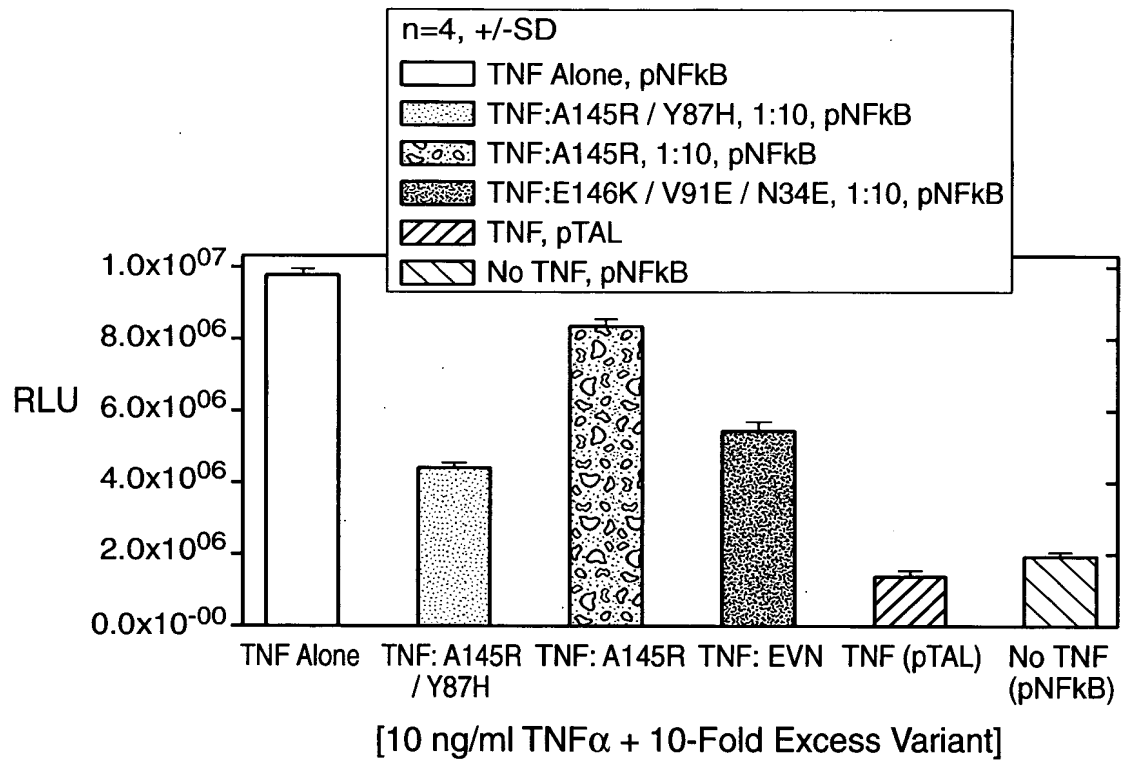
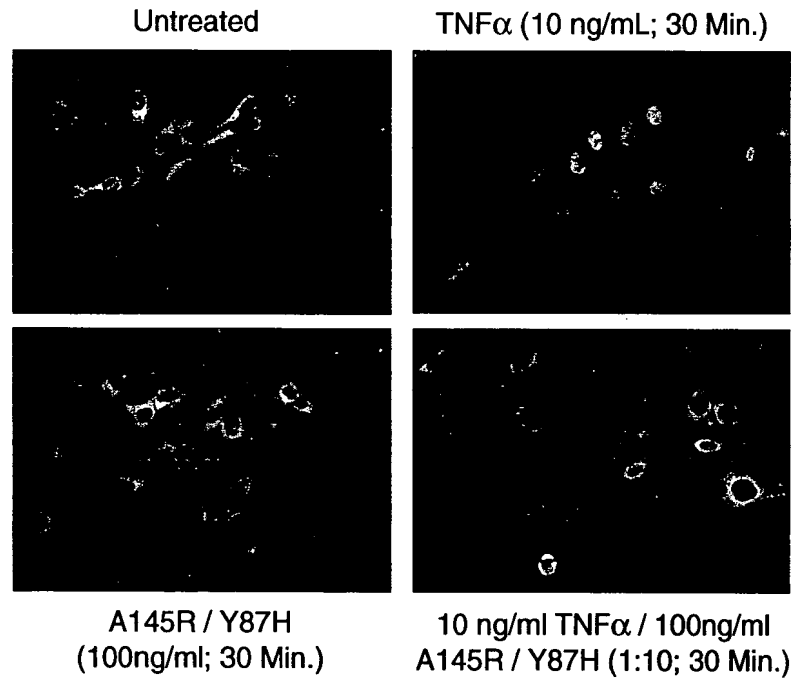


Figure 3



Figure 3



**FIG. 4A****FIG. 4B**



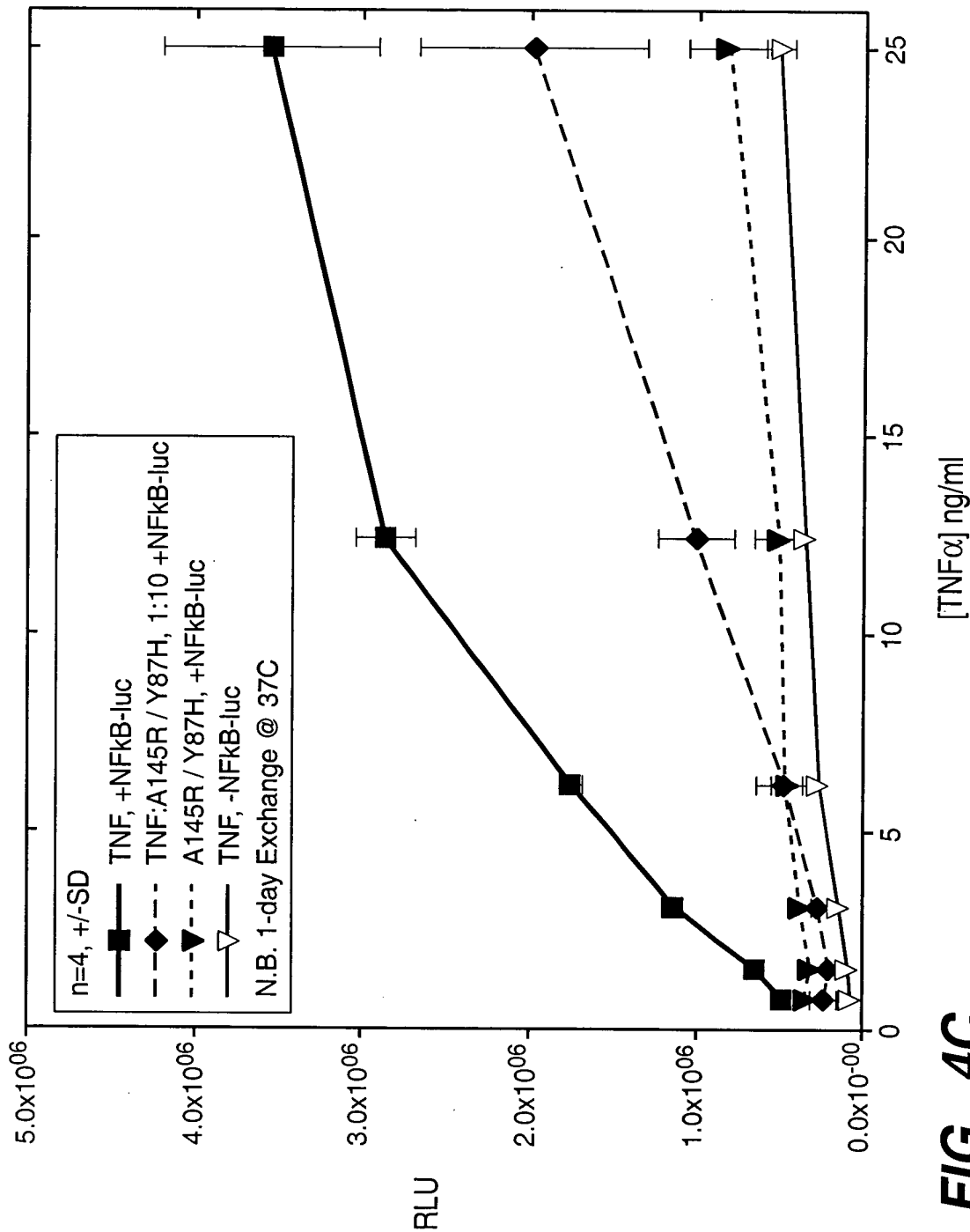
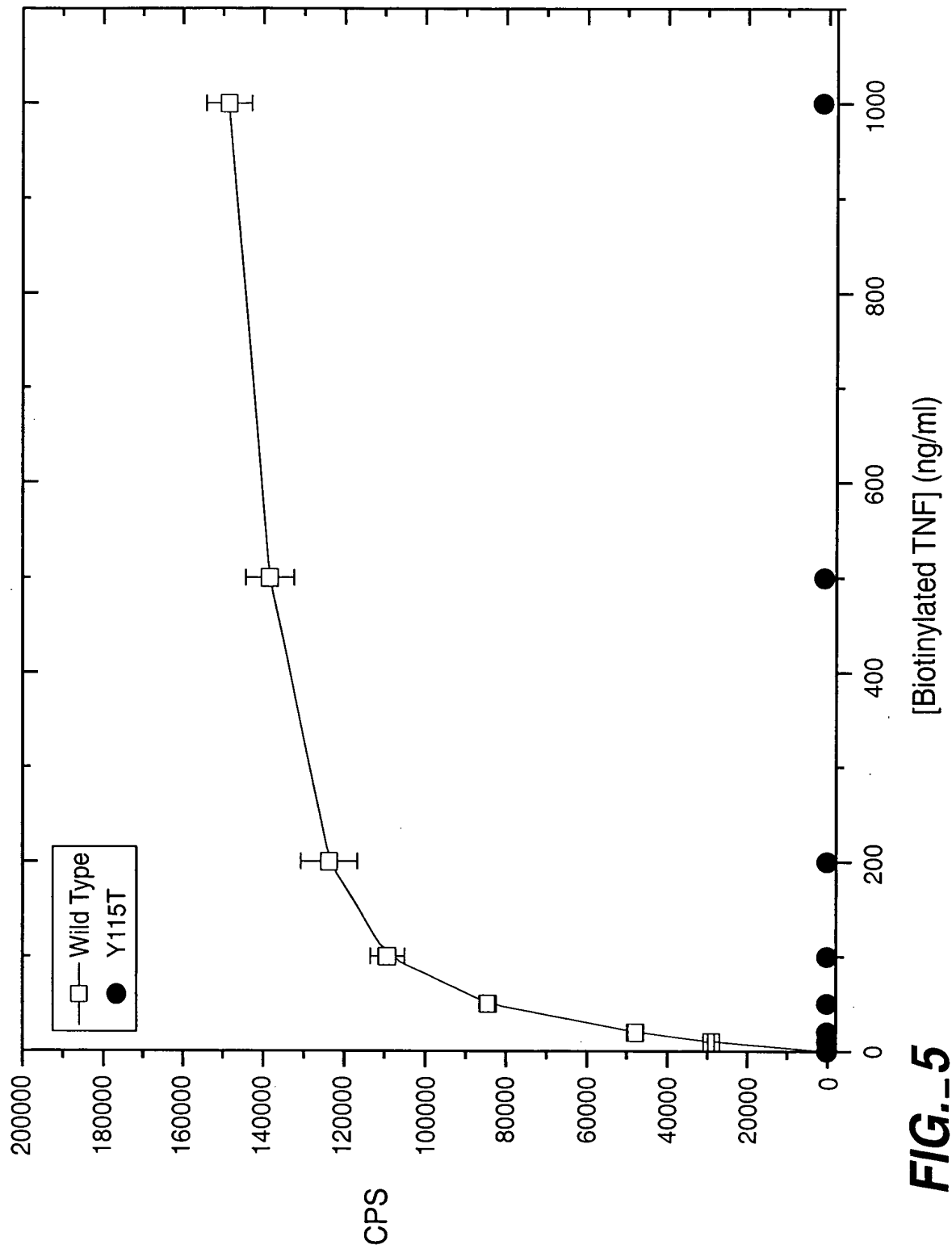


FIG. 4C

**FIG. 5**

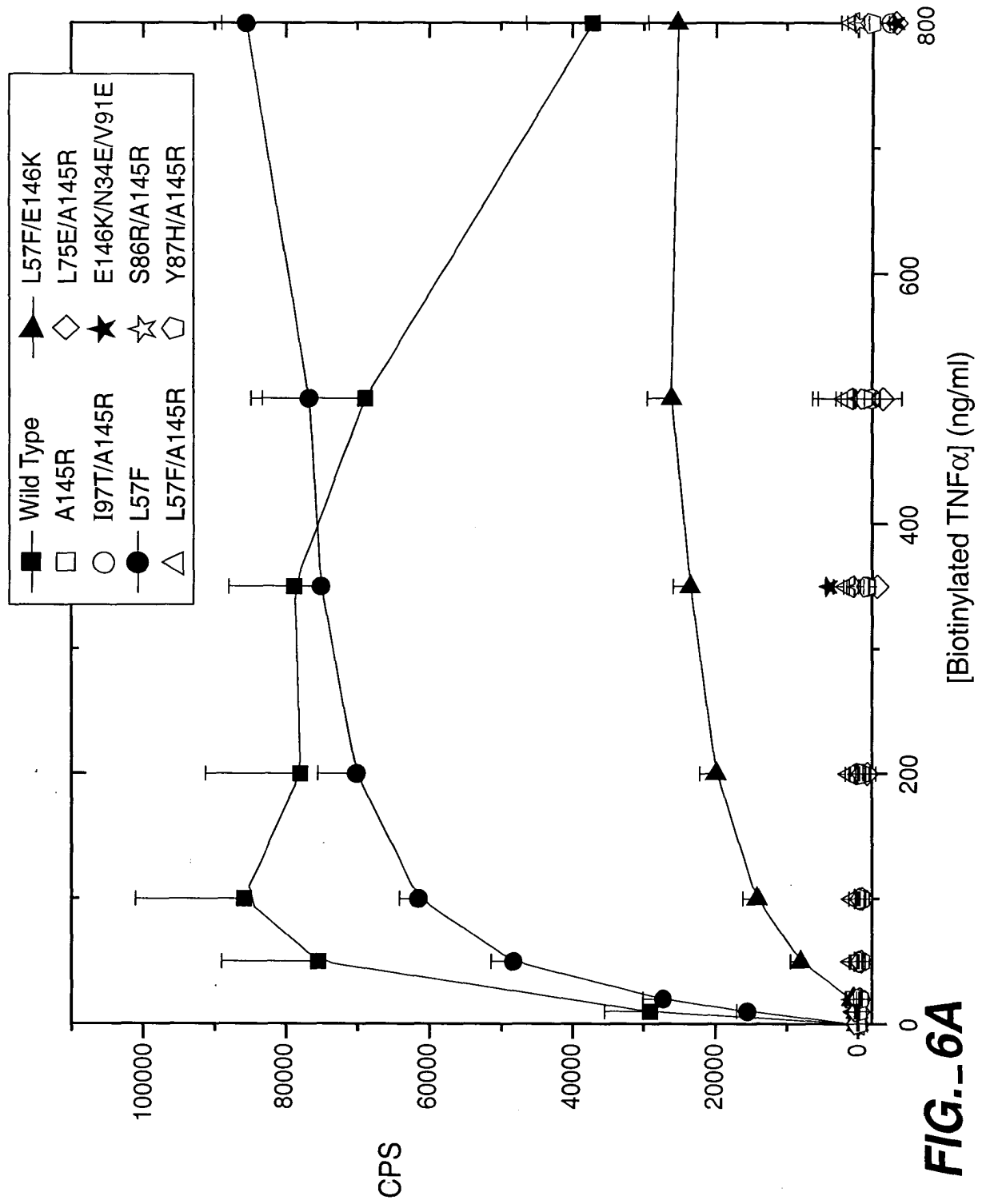
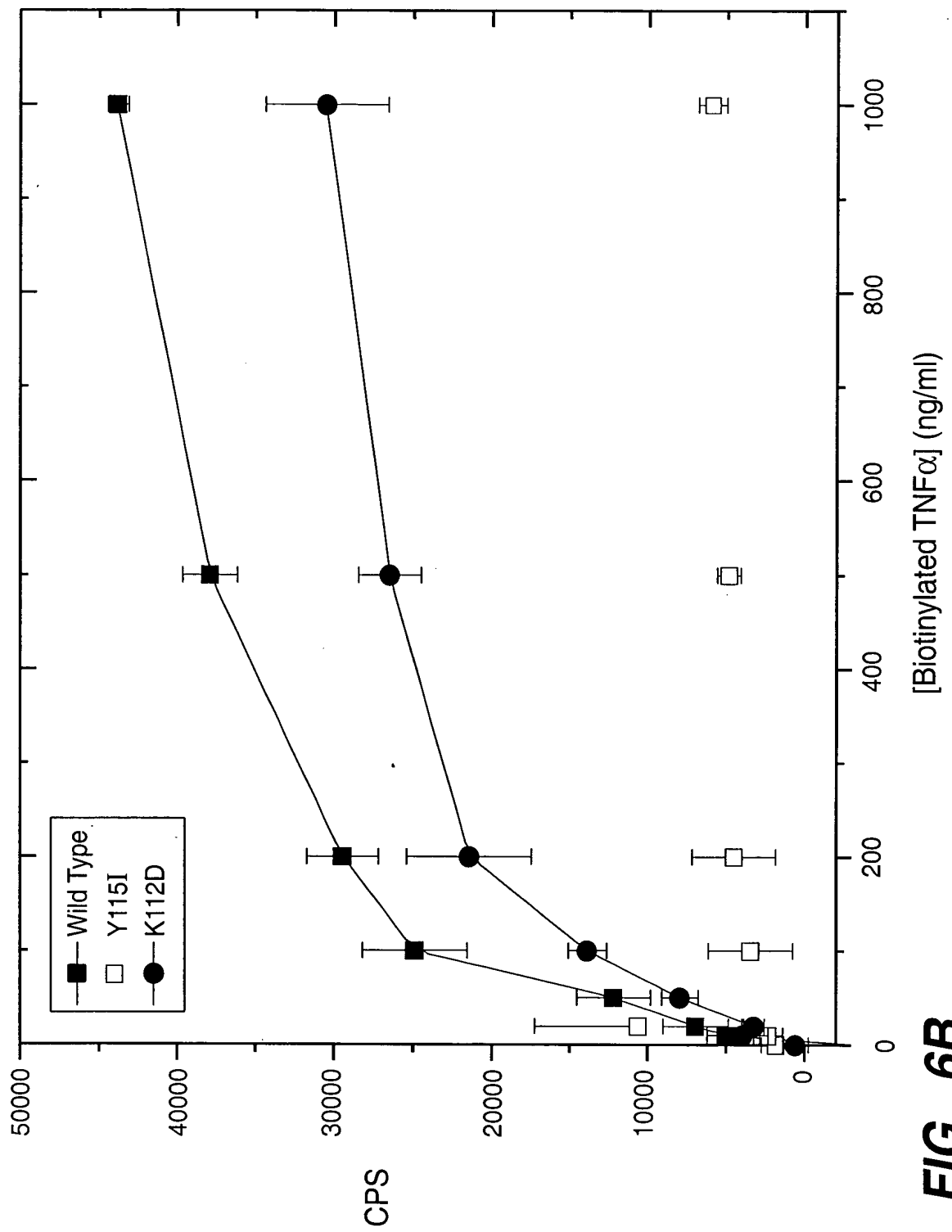
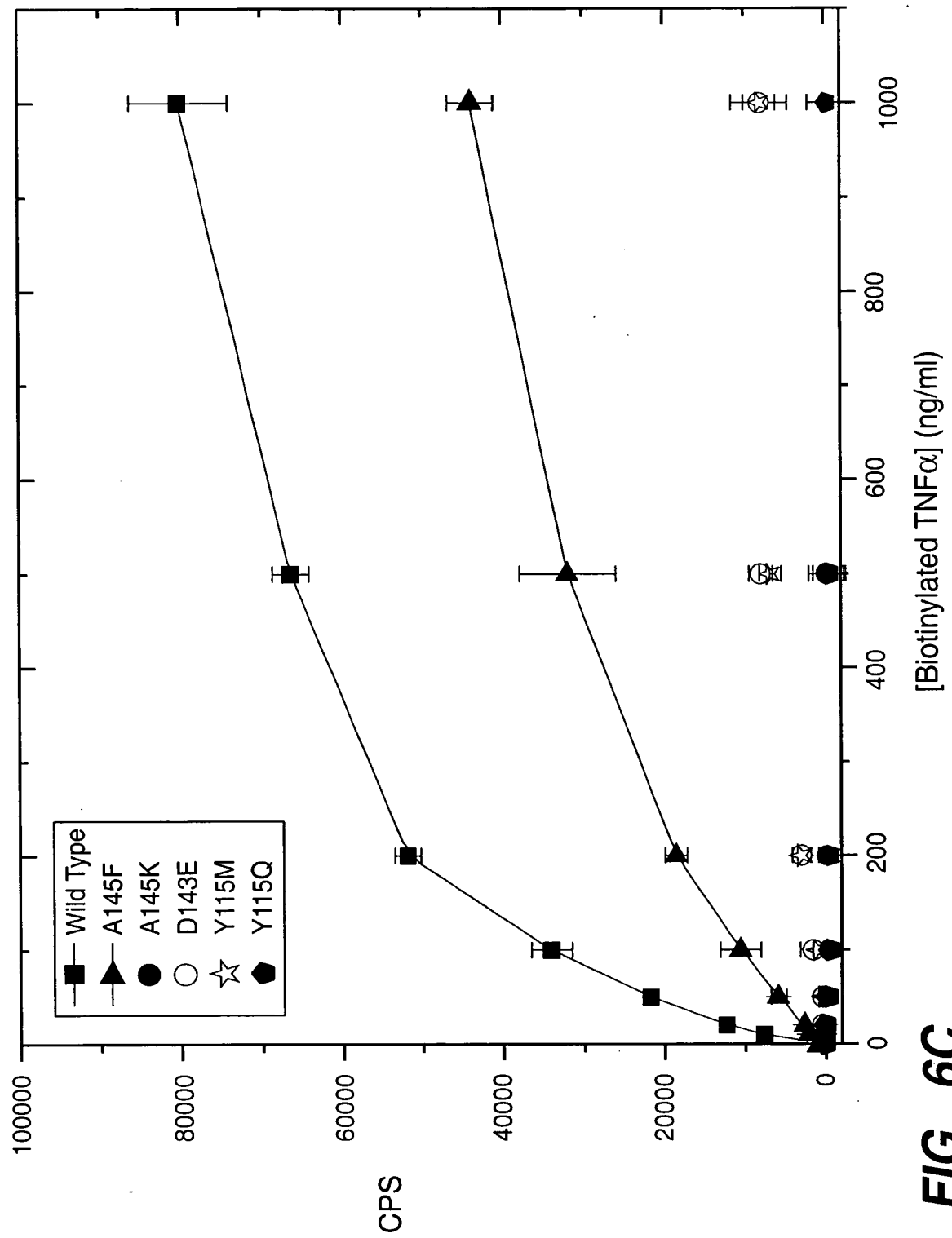
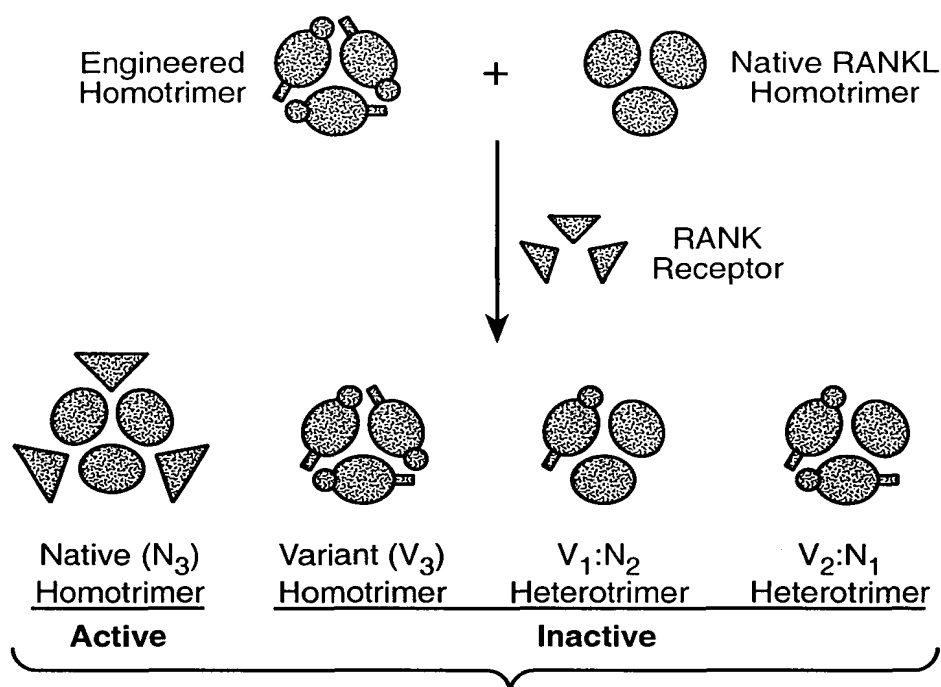


FIG. 6A



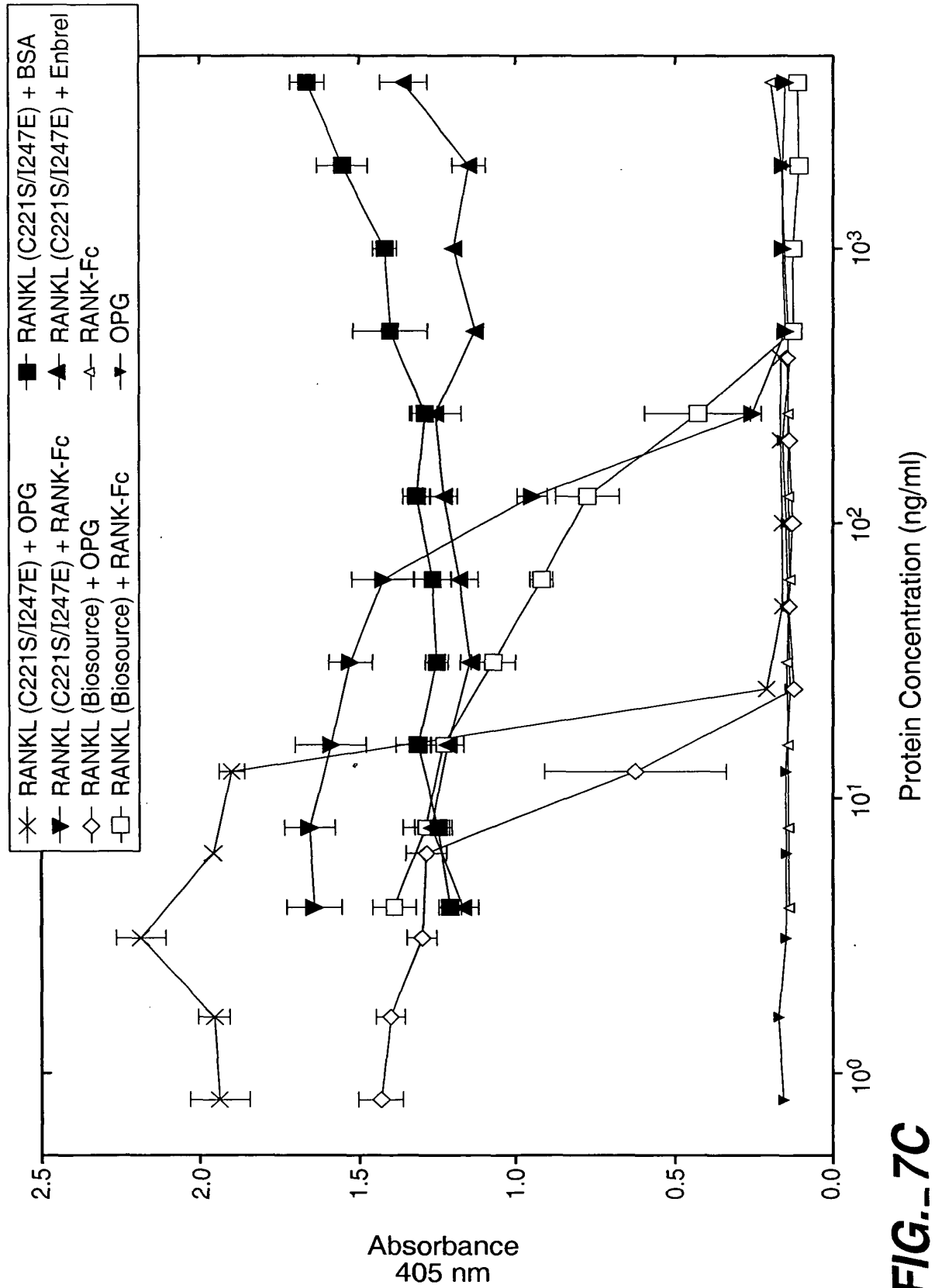
**FIG.\_6C**

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**FIG. 7A**

A172R	R191Q	K248E	I249R-S228E
A172Q	G191A	I249Q	K248E-T227K
S179E	R223Q	I249R	K248E-T227Q
S179D	R223E	H253T	R191K-I249R
H180E	R223M	H253S	R191E-I249R
H180N	H225R	S268D	G192A-K248E
H180S	H225N	E269R	D190Q-K248E
K181Q	H225T	E269Q	D190T-K248E
K181E	H225E	E269T	H225R-I249R
K181R	E226Q	E269K	H225N-I249R
S183K	E226R	F270V	E226Q-I249R
S183E	E226D	F270E	E226R-I249R
Y188F	T227K	F270T	H225R-G192A
Y188M	T227Q	F270K	H225N-G192A
Y188Q	S228H	R284E	H225R-D190Q
Y188E	S228E	S297Q	H225R-D190T
H189E	S228D	S297E	G192A-H225R-I249R
H189A	T233R	S297D	G192A-H225N-I249R
H189R	T233D	D300N	R191K-E226Q-K248E
D190Q	T233E	D302E	R191K-E226R-K248E
D190T	Q237K	D302Q	
R191K	Q237E	D302H	
R191E	Q237T	I249R-S228H	

**FIG. 7B**



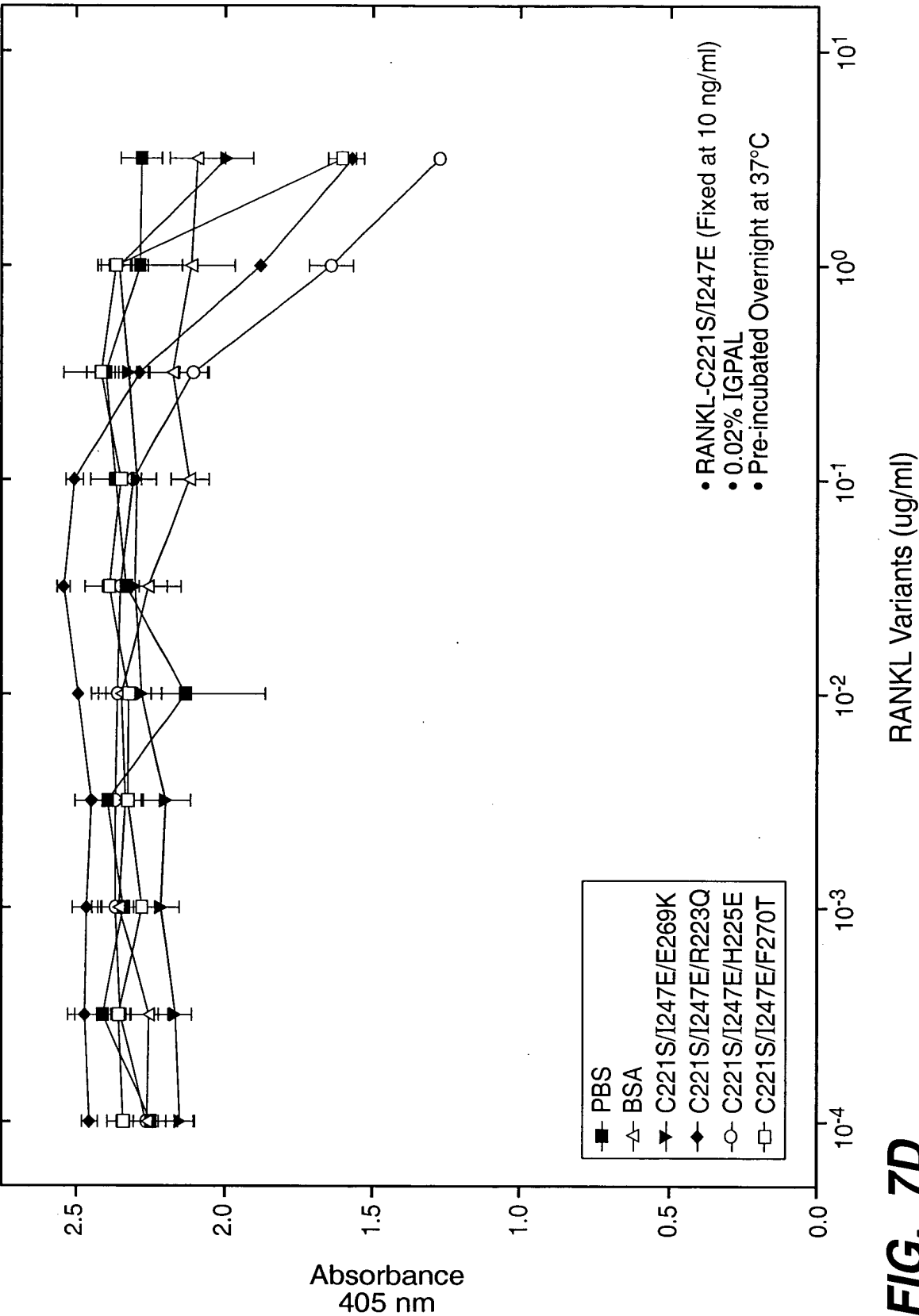
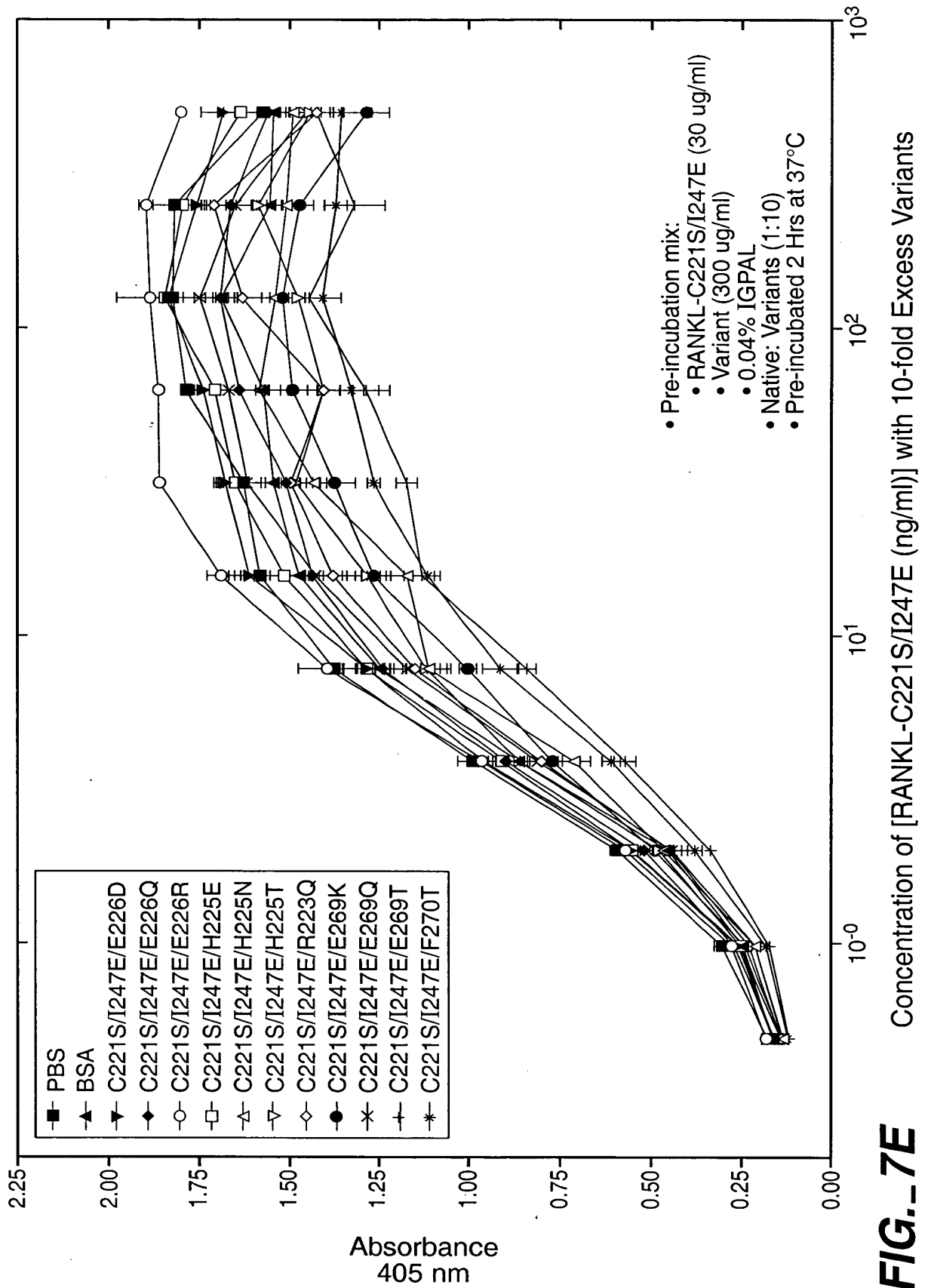


FIG.\_7D





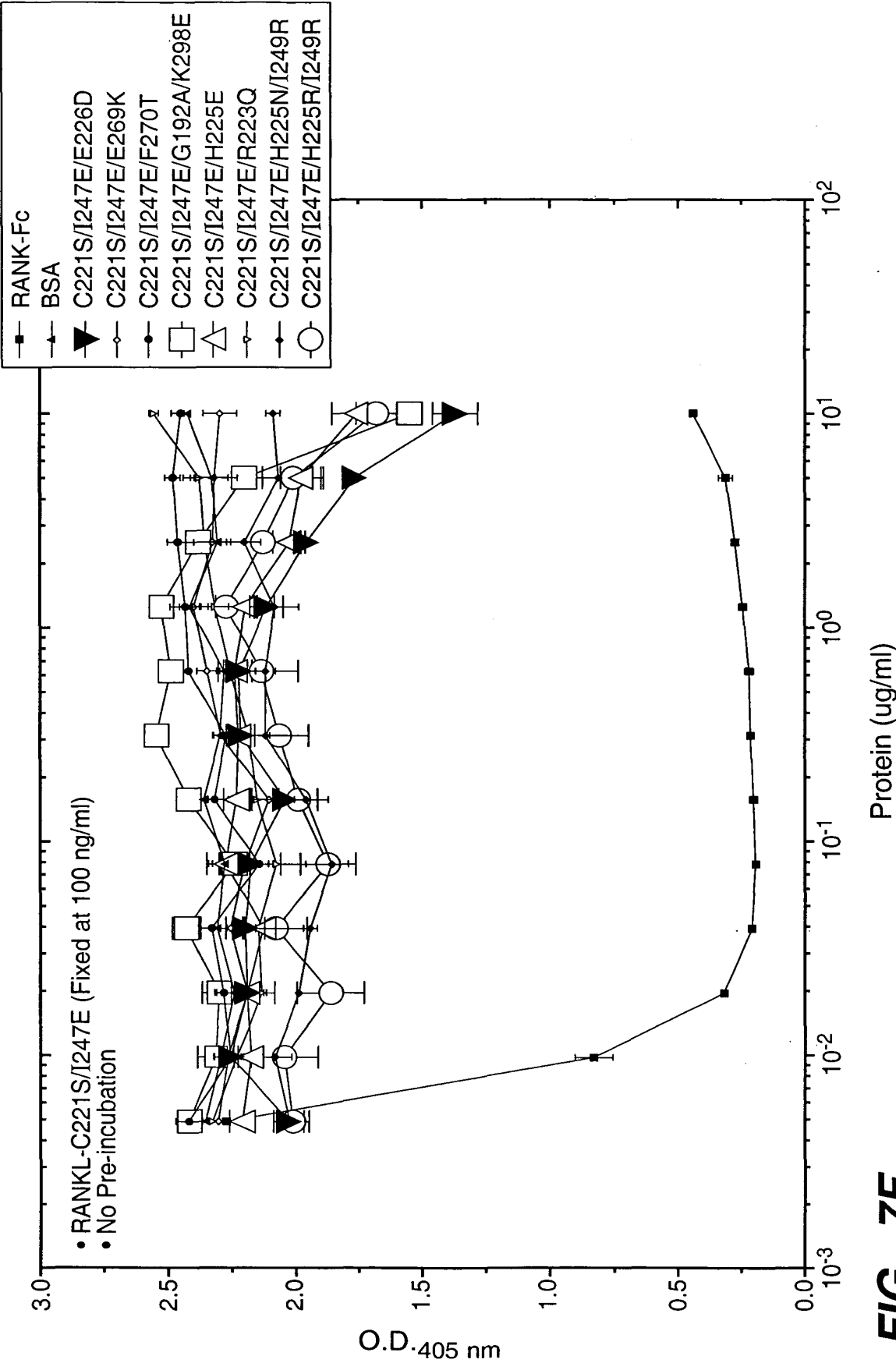


FIG. 7F



C221S/I247E/E269T  
C221S/I247E/F270T  
C221S/I247E/E269K  
C221S/I247E/H225N  
C221S/I247E/H225E  
C221S/I247E/R223Q  
C221S/I247E/E226D  
C221S/I247E/G192A/K298E  
C221S/I247E/H225R/I249R

***FIG.\_7G***

